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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



### DETAILED ACTION

1. The amendment filed on 12/04/07 has been received and entered. Claims 17-23, 25-28, 30-34 and 36-48 are pending.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 17-23, 25-28, 30-34, 36-38, and 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thearling (US 6,240,411 B1) in view of Wilkinson et al. (US 2002/0174182 A1) and further in view of Hollander (US 6,697,088).

As per claim 17 Thearling is directed to a data mining system for delivering presentations associated with data mining models, said data mining system comprising:

a repository to store said data mining models, customer attributes (fig. 3, #30);

means to edit said data mining models, and said customer attributes (column 2, lines 54-61; column 9, lines 60-67; column 10, lines 1-7; column 11, lines 12-14);

means to receive inputs from said customer system and to deliver said presentation to said customer system (column 4, lines 42-48; column 5, lines 1-7);

Thearling does not teach wherein said inputs include a customer identification and a presentation definition identification

Wilkinson et al. teaches wherein said inputs include a customer identification (Wilkinson et al., paragraph 0032, second column, lines 6-8; paragraph 0037, second column, lines 10-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Wilkinson et al. to include wherein said inputs include a customer identification and a presentation definition identification because recording user information is well known in the art.

Thearling does not teach wherein said means to generate applies said data mining model to said customer attribute to produce an outcome for display in said presentation according to a format included in said presentation definition.

Wilkinson et al. teaches wherein said means to generate applies said data mining model to said customer attribute to produce an outcome for display in said presentation according to a format included in said presentation definition (Wilkinson et al., paragraph 0036, lines 24-29; paragraph 0039, lines 5-8; paragraph 0045, lines 10-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Wilkinson et al. to include said means to generate applies said data mining model to said customer attribute to produce an outcome for display in said presentation according to a format included in said presentation definition because using formatting makes reading of the results easier and more efficient (Wilkinson et al., paragraph 0025).

Thearling does not teach one or more rules.

Wilkinson et al. teaches one or more rules (Wilkinson et al. paragraph 0009, lines 19-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Wilkinson et al. to include one or more rules because using rules are well known in the art.

Thearling does not teach presentation definitions.

Hollander teaches presentation definitions (Hollander column 4, lines 63-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Hollander to include presentation definitions because the definitions could personalize the presentation to particular needs (Hollander, column 5, lines 1-3).

Thearling does not teach means to generate a presentation to deliver to a customer system; wherein said means to generate includes an analytic decision engine system including model presentation services and scoring services modules.

Hollander teaches means to generate a presentation to deliver to a customer system; wherein said means to generate includes an analytic decision engine system including model presentation services and scoring services modules (column 4, lines 63-67).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Hollander to include means to generate a presentation to deliver to a customer system; wherein said means to generate includes an analytic decision engine system including model presentation

services and scoring services modules because the definitions could personalize the presentation to particular needs (Hollander, column 5, lines 1-3).

Thearling does not teach wherein said means to generate selects a presentation definition using said presentation definition identification and selects a customer attribute using said customer identification; wherein said presentation definition includes a reference to a data mining model.

Hollander teaches wherein said means to generate selects a presentation definition using said presentation definition identification and selects a customer attribute using said customer identification; wherein said presentation definition includes a reference to a data mining model (column 4, lines 41-43; column 4, lines 63-35)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Hollander to include means to generate a presentation to deliver to a customer system; wherein said means to generate selects a presentation definition using said presentation definition identification and selects a customer attribute using said customer identification; wherein said presentation definition includes a reference to a data mining model because using location identifiers is well known in the art.

Thearling does not teach presentation definition identification.

Hollander teaches presentation definition identification (Hollander column 4, lines 41-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Hollander to include

presentation definition identification because using location identifiers is well known in the art.

As per claim 18 Thearling as modified is directed to wherein said data mining models include one or more of simple scores, complex scores, static scores, and dynamic scores, rules, rules sets, and rules systems (Wilkinson et al., paragraph 0024, lines 7-9; wherein the “logical rules” could encompass all recited limitations).

As per claim 19 Thearling as modified is directed to wherein said presentation definitions include defined sets of content including one or more of references to said data mining models, scores, rules, said customer attributes, activity suggestions, to do lists, pop-up windows, HTML segments, and XML scripts (Wilkinson et al., paragraph 0033, lines 9-12 wherein “time” could mean an “attribute”).

As per claim 20 Thearling as modified is directed to wherein said presentations include one or more of simple presentations, range based presentations, and complex presentations (Wilkinson et al., paragraph, 0022; paragraph 0023, lines 11-14; paragraph 0024, second column, lines 2-8).

As per claim 21 Thearling as modified is directed to wherein said repository is a database having a database schema and a database management system (Wilkinson et al., paragraph 0032, second column, lines 4-5).

As per claim 22 Thearling as modified is directed to wherein said means to edit said data mining models, said presentation definitions, and said customer attributes includes a data mining console system (Thearling; column 2, lines 54-61; column 9, lines 60-67; column 10, lines 1-7; column 11, lines 12-14).

As per claim 23 Thearling as modified is directed to wherein said means to edit said data mining models, said presentation definitions, and said customer attributes includes one or more of text editors, scripting tools, web development tools, and HTML editors (Thearling, column 1, lines 65-67, column 2, lines 1-11).

As per claim 25 Thearling as modified is directed to wherein said means to receive inputs from said customer system and to deliver said presentations to said customer system includes a network (Wilkinson et al., paragraph 0032, second column, lines 14-15; paragraph 0032, second column, lines 30-34; paragraph 0040, lines 5-10).

As per claim 26 Thearling as modified is directed to wherein said customer system includes one or more data mining management consoles integrated with or connected over a network (Wilkinson et al., paragraph 0031, line 5; paragraph 0046, line 9).

As per claim 27 Thearling as modified is directed to herein said customer system includes one or more applications running on a computer, system, or other appliance integrated with or connected over a network (Wilkinson et al., figure 2B, number 238, 232; paragraph 0046).

As per claim 28 Thearling as modified is directed to wherein said customer system includes one or more thin or thick clients in a client-server or browser-server environment integrated with or connected over a network (Wilkinson et al., paragraph 0046, line 9).

As per claim 30 Thearling as modified is directed to wherein said inputs include one or more of said customer attributes (Wilkinson et al., paragraph 0032, second column, lines 6-8; paragraph 0037, second column, lines 10-11).

As per claim 31 Thearling as modified is directed to wherein said data mining system includes one or more reporting systems (Wilkinson et al., paragraph 0021, page 3, lines 7-9).

As per claim 32 Thearling as modified is directed to wherein said reporting systems include one or more of outcome monitoring systems and presentation usage monitoring systems (Wilkinson et al., paragraph 0021, page 3, lines 7-13).

As per claim 33 Thearling as modified is directed to wherein said reporting systems provide one or more of said inputs (Wilkinson et al., paragraph 0021, page 3, lines 10-13; paragraph 0033, lines 14-21).

As per claim 34 Thearling as modified is directed to wherein said data mining system includes one or more of servers, memory devices, processing units, input devices, output devices, display devices (Wilkinson et al., paragraph 0046).

As per claim 36 Thearling as modified is directed to wherein said network is an Internet network (Wilkinson et al., paragraph 0046, line 9).

As per claim 37 Thearling is directed to a method for generating presentations of outcomes associated with data mining models for display on a display screen, comprising:

storing one or more data mining models; wherein the customer attributes are name-value pairs; wherein the data mining models generate scores based on one or more of the customer attributes; and, wherein the rules are for branching on one or more of the scores and the customer attributes to choose between outcomes (fig 3, #30; column 3, lines 65-67; column 8, lines 48-50; column 8, lines 34-43) ;

receiving a request for a presentation for an outcome, the request including a one or more of a customer identification and one or more customer attributes; and,

wherein the customer identification is a key to one or more customer attributes stored in the repository (column 5, lines 9-38);

in response to the request, retrieving one or more of the customer attributes from the repository using the customer identification (column 8, lines 34-43);

generating one or more scores from the data mining models referenced by the presentation definition using one or more of the customer attributes provided by the request or retrieved from the repository (fig. 10b #100; column 9, lines 60-67; column 10, lines 1-7);

determining the outcome by applying one or more rules in the presentation definition to one or more of the scores and the customer attributes (column 2, lines 12-23); and,

Thearling does not teach formatting the presentation for the outcome for display on the display screen using the formatting information contained in the presentation definition.

Wilkinson et al. teaches formatting the presentation for the outcome for display on the display screen using the formatting information contained in the presentation definition (Wilkinson et al., paragraph 0036, lines 24-29; paragraph 0039, lines 5-8; paragraph 0045, lines 10-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Wilkinson et al. to include formatting the presentation for the outcome for display on the display screen using the formatting information contained in the presentation definition because using formatting

makes reading of the results easier and more efficient (Wilkinson et al., paragraph 0025).

Thearling does not teach one or more references to customer attributes;

Wilkinson et al. teaches one or more references to customer attributes (Wilkinson et al., paragraph 0032, second column, lines 6-8; paragraph 0037, second column 10-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Wilkinson et al. to include one or more references to customer attributes because using and/or recording user information is well known in the art.

Thearling does not teach wherein the presentation definitions have respective formatting information for formatting presentations of outcomes

Wilkinson et al. teaches wherein the presentation definitions have respective formatting information for formatting presentations of outcomes (Wilkinson et al., paragraph 0036, lines 24-29; paragraph 0039, lines 5-8; paragraph 0045, lines 10-11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Wilkinson et al. to include wherein the presentation definitions have respective formatting information for formatting presentations of outcomes because using formatting makes reading of the results easier and more efficient (Wilkinson et al., paragraph 0025).

Thearling does not teach one or more rules.

Wilkinson et al. teaches one or more rules (Wilkinson et al. paragraph 0009, lines 19-20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Wilkinson et al. to include one or more rules because using rules are well known in the art.

Thearling does not teach presentation definitions.

Hollander teaches presentation definitions (Hollander, column 4, lines 63-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Hollander to include presentation definitions because the definitions could personalize the presentation to particular needs (Hollander, column 5, lines 1-3).

Thearling does not teach retrieving a presentation definition from among the one or more presentation definitions using the presentation identification and

Hollander teaches retrieving a presentation definition from among the one or more presentation definitions using the presentation identification (Hollander, column 4, lines 41-43)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling by teachings of Hollander to include retrieving a presentation definition from among the one or more presentation definitions using the presentation identification because retrieving definitions is well known in the art.

As per claim 38 Thearling as modified is directed to wherein the data mining models are one or more of a logistic regression, a decision tree, a neural network, a Bayesian network, a linear regression, a cluster model, a K-Means cluster model, an expectation maximizing cluster model, and an association rule (Thearling; column 8, lines 19-23).

As per claim 41 Thearling as modified is directed to further comprising importing the data mining models and presentation definitions into the repository (Thearling; fig. 6, #62; fig 6, #64) .

As per claim 42 Thearling as modified is directed to further comprising receiving updated data mining models and updated presentation definitions to replace the data mining models and presentation definitions in the repository (Thearling; fig. 2; fig. 9, #92).

As per claim 43 Thearling as modified is directed to further comprising receiving the one or more rules for the presentation definition (Thearling; column 8, lines 34-43).

As per claim 44 Thearling as modified is directed to wherein the scores are one or more of simple scores, complex scores, static scores, and dynamic scores (Wilkinson et al., paragraph 0024, lines 7-9; wherein the “logical rules” could encompass all recited limitations).

As per claim 45 Thearling as modified is directed to herein the outcomes provide one or more of defined sets of content, data mining model scores, activity suggestions, to-do lists, pop-up windows, HTML segments, extensible markup language (XML) scripts, and sets of computer instructions (Wilkinson et al., paragraph 0033, lines 9-12 wherein “time” could mean an “attribute”).

As per claim 46 Thearling as modified is directed to herein the outcomes are one or more of simple messages, range based messages, and complex messages (Wilkinson et al., paragraph, 0022; paragraph 0023, lines 11-14; paragraph 0024, second column, lines 2-8).

As per claim 47 Thearling as modified is directed to wherein the request is received over a network (Wilkinson et al., paragraph 0032, second column, lines 14-15; paragraph 0032, second column, lines 30-34; paragraph 0040, lines 5-10).

As per claim 48 Thearling as modified is directed to wherein the network is an Internet network (Wilkinson et al., paragraph 0046, line 9).

4. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thearling (US 6,240,411 B1) in view of Wilkinson et al. (US 2002/0174182 A1) and further is view of Tuzhilin (US 6,236,978 B1).

As per claim 39 Thearling as modified still does not teach wherein the customer attributes are one or more of age information and sex information.

Tuzhilin teaches wherein the customer attributes are one or more of age information and sex information (Tuzhilin; column 3, lines 43-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling as modified by teachings of Tuzhilin to include the customer attributes are one or more of age information and sex information because recording and using user information is well known in the art.

5. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thearling (US 6,240,411 B1) in view of Wilkinson et al. (US 2002/0174182 A1) and further in view of Hollander (US 6,697,088) and further in view of Johnson (US 2001/0037346 A1).

As per claim 40 Thearling as modified still does not teach wherein the formatting information is markup language formatting information.

Johnson teaches the formatting information is markup language formatting information (Johnson; paragraph 0026, lines 13-17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the Thearling as modified by teachings of Johnson to include the formatting information is markup language formatting information because

using markup languages is useful way to tag data (Johnson; paragraph 0026, lines 13-14).

### ***Response to Arguments***

6. Applicant's arguments filed 12/04/07 have been fully considered but they are not persuasive.

As to applicant's argument that "Hollander does not teach presentation definition identification" is not found persuasive.

Hollander does teach presentation definitions that the presentation manager retrieves from a database as shown in column 4, lines 40-43. It would be obvious to conclude that to retrieve anything from a database requires some sort of identifier to identify the object of interest (using identifiers to access information is inherent feature of a database).

As per applicant's argument that Hollander does not teach "wherein said means to generate include an analytic decision engine system including model presentation services and scoring services modules" is not found persuasive.

Hollander in column 4, lines 58-68 and column 5, lines 1-5 show a development tool that generates presentation definitions. It also contains reference to presentation manager that uses the presentation to include data formatted as necessary and displayed in appropriate fields. The development tool can also customize the layout as per user desire, and could include a scoring schema such as ordering of fields for

example. The Thearling reference also shows a scoring schema in column 2, lines 23-28.

As per applicant's argument that Hollander does not teach "wherein said presentation definition includes a reference to a data mining model" is not found persuasive.

Hollander teaches identifiers and associated data to present information to a user. The operation in column 5 lines 34-36 uses identifiers and data to present a data in specific format. The identifiers could be references to anything as for example a data or a data model, therefore broadly reads on the limitation.

As per applicant's argument that "Wilkinson et al. does not teach wherein inputs include a customer presentation definition identification is received as an input from a customer system" is not found persuasive.

Wilkinson et al. teaches in paragraph 0032, second column, lines 3-8 shows that database receives information associated with target interaction. The information could mean identification information as well as user identification. Therefore Wilkinson et al. broadly teaches the limitations of the claim in question.

As per applicant's argument that "Wilkinson et al. does not teach applying a data mining model to said customer attribute to produce an outcome for display in said presentation according to format included in said presentation" is not found persuasive.

Wilkinson et al. in paragraph 0009, lines 19-20 states that guidelines and rules are used to present the information presentation to a user. It would be obvious that a mining model through the use of guidelines and rules presents the result in such a way to satisfy the conditions set by those guidelines and rules.

As per applicant's argument that "Wilkinson et al. does not specify that the rules are included in a presentation definition" is not found to be persuasive.

As per obviousness rule Wilkinson et al. teaches the multiple rules are possible. The claim also calls for reference to data mining model not the model itself. The Wilkinson et al. reference teaches that information motivation plan sets guidelines and rules for information presentation; therefore the reference broadly teaches the argued claim limitation.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tomasz Ponikiewski whose telephone number is (571) 272-1721. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571)272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T.P./

April 23, 2008

/N. A./

Primary Examiner, Art Unit 2165

4/23/08

/Christian P. Chace/

Supervisory Patent Examiner, Art Unit 2165